

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Chikao Nishino et al.

Serial No.: (Reissue Application  
of U.S. Patent No. 5,814,634  
issued on September 29, 1998)

Art Unit: 1203

Filed: April 17, 1997

Examiner:

For: Alkylenediamine Derivative, Anti-Ulcer Drug, and  
Antibacterial Drug

Hon. Assistant Commissioner  
for Patents and Trademarks  
Washington, DC 20231

REISSUE APPLICATION DECLARATION  
AND POWER OF ATTORNEY BY INVENTORS

Sir:

We, the named applicants of the above referenced U.S. Patent,  
hereby declare that:

1. Our residences, post office addresses, and citizenships  
are as stated below next to our names.

2. We are the original and joint inventors of the subject  
matter which is described and claimed in U.S. Patent No. 5,814,634  
(hereafter "the '634 patent") granted September 29, 1998, and  
described and claimed in the above-identified reissue application.

3. We have reviewed and understand the contents of the  
specification and claims of the '634 patent and the specification  
and claims of the above-identified reissue application and as  
amended to date.

4. We believe the '634 patent to be wholly or partly  
inoperative or invalid by reason of the patentees claiming less  
than the patentees had the right to claim in said patent and  
because of an error in said patent, which error is described in  
paragraphs 6 through 9 of this Declaration.

5. The errors described in paragraphs 6 through 9 hereof, and all errors being corrected in this reissue application up to the time of filing of this Declaration arose without any deceptive intention on the part of the applicants.

6. During the prosecution of the corresponding European application (Application No. 97 302 666.9; filing date: April 18, 1998) in the European Patent Office (hereafter "the EPO") it was realized that the compounds of claim 1, as originally written, had been inadvertently limited to alkylenediamine derivatives or salts thereof of a general formula 1 in which "each of  $R_3$  and  $R_3'$  represents methyl group, prenyl group, or geranyl group and when one of  $R_3$  and  $R_3'$  is prenyl group or geranyl group, another is methyl group" and that the disclosure of the inventors in the patent was much broader than the scope of the issued claim 1. It was further realized during the prosecution in the EPO, that the compounds of claim 5, as originally written, had been inadvertently limited to alkylenediamine derivatives or salts thereof of a general formula 4 in which " $R_1$  and/or  $R_2$  is an alkenyloxy group expressed by the...formula 5... wherein each of  $R_6$  and  $R_6'$  represents methyl group, prenyl group, or geranyl group and when one of  $R_6$  and  $R_6'$  is prenyl group or geranyl group, another is methyl group" and that the disclosure of the inventors in the patent was much broader than the scope of the issued claim 5.

7. The error which we seek to cure by reissue is the unintentional omission of one supplementary  $CH_2$  group from (a) the substituents  $R_3$  and  $R_3'$  of claim 1 and (b) the substituents  $R_6$  and

R<sub>6</sub>' of claim 5.

8. Amended claim 1 now requires in pertinent part that "each of R<sub>3</sub> and R<sub>3</sub>' represents methyl group, prenyl-CH<sub>2</sub> group, or geranyl-CH<sub>2</sub> group and when one of R<sub>3</sub> and R<sub>3</sub>' is prenyl-CH<sub>2</sub> group or geranyl-CH<sub>2</sub> group, another is methyl group," in lieu of the former erroneous proviso reciting that "each of R<sub>3</sub> and R<sub>3</sub>' represents methyl group, prenyl group, or geranyl group and when one of R<sub>3</sub> and R<sub>3</sub>' is prenyl group or geranyl group, another is methyl group." Without the proposed amendment, claim 1 provides no coverage for the compounds in which:

- (a) R<sub>1</sub> and R<sub>2</sub> are not alkenyloxy groups, R<sub>3</sub> is CH<sub>3</sub>- and R<sub>3</sub>' is prenyl-CH<sub>2</sub>- group when only one neryloxy group is on a benzene ring;
- (b) R<sub>1</sub> and R<sub>2</sub> are not alkenyloxy groups, R<sub>3</sub> is prenyl-CH<sub>2</sub> group and R<sub>3</sub>' is methyl group when only one geranyloxy group is on a benzene ring;
- (c) R<sub>1</sub> and R<sub>2</sub> are not alkenyloxy groups, R<sub>3</sub> is geranyl-CH<sub>2</sub>- group and R<sub>3</sub>' is methyl group when only one farnesyloxy group is on a benzene ring; and
- (d) one of R<sub>1</sub> and R<sub>2</sub> is geranyloxy, R<sub>3</sub> is prenyl-CH<sub>2</sub>- group and R<sub>3</sub> is methyl group when two geranyloxy groups are on a benzene ring.

Such compounds are illustrated in Examples 2-14, 20-26, 29-34, 36-38 and 41-61 of the '634 patent. Thus, this difference is an error related to subject matter which was not previously claimed and, hence, the issued claim 1 does not claim all that we are entitled

to claim in the '634 patent. No new matter is added by this amendment of claim 1.

9. Similarly, amended claim 5 now reads in pertinent part that "wherein each of  $R_b$  and  $R_b'$  represents methyl group, prenyl-CH<sub>2</sub> group, or geranyl-CH<sub>2</sub> group and when one of  $R_b$  and  $R_b'$  is prenyl-CH<sub>2</sub> group or geranyl-CH<sub>2</sub> group, another is methyl group" in lieu of the previous mistaken proviso stating that "wherein each of  $R_b$  and  $R_b'$  represents methyl group, prenyl group, or geranyl group and when one of  $R_b$  and  $R_b'$  is prenyl group or geranyl group, another is methyl group." Without the proposed amendment --because according to the original claim 5  $R_b$  and  $R_b'$  can be neither prenyl-CH<sub>2</sub>- group nor geranyl-CH<sub>2</sub>- group--claim 5 provides no coverage for the compounds in which each of  $R_1$  and  $R_2$  is alkenyloxy group such as prenyloxy, geranyloxy, neryloxy or farnesyloxy. Such compounds are depicted in Examples 11-14 and 36-38 of the '634 patent. Thus, this difference is an error related to subject matter which was not previously claimed and, hence, the issued claim 5 does not claim all that we are entitled to claim in the '634 patent. No new matter is added by this amendment of claim 5.

10. Support for amended claim 1 that we seek to present in this reissue application can be found in column 17, line 8 through column 21, line 12 (Examples 2-14), column 22, line 31 through column 23, line 33 (Examples 20-26), column 24, line 44 through column 25, line 38 (Examples 29-34), column 27, line 1 through column 23, line 29 (Examples 36-38) and column 29, line 1 through column 23, line 23 (Examples 41-61) of the '634 patent. Similarly,

support for amended claim 5 can be found in column 20, line 34 through column 21, line 12 (Examples 11-14) and column 27-28, line(s) 1 through column 27-28, line(s) 43 (Examples 36-38) thereof. Thus, claims 1 and 5 as proposed to be amended by this reissue recite alkylenediamine derivatives or salts thereof clearly and adequately described in the '634 patent.

11. It was also realized during said prosecution before the EPO, that, in order to obtain broader patent protection, a reissue application needed to be filed no later than September 29, 2000.

12. We acknowledge the duty to disclose information which is material to the examination of this application in accordance with 37 C.F.R. 1.56(a) and which occurred between the filing date of said prior application and the filing date of the application which issued as the '634 patent.

13. We hereby claim foreign priority benefits under Section 119 of Title 35, United States Code, of any foreign patent application for patent or inventor's certificate listed below and have also identified any foreign application for patent or inventor's certificate having a filing date before that of the application of which priority is claimed:

- (a) Japanese Patent Application No. 8-122195 filed on Apr. 18, 1996;
- (b) Japanese Patent Application No. 8-278871 filed on Sep. 30, 1996; and
- (c) Japanese Patent Application No. 9-12056 filed on Jan. 6, 1997.

Such priority benefits were claimed in USP 5,814,634, now sought to be reissued. Moreover, the disclosures of the above-identified priority documents were and continue to be incorporated herein by reference.

14. We hereby appoint Ronald R. Snider, Reg. No. 24,962, Elizabeth J. Pawlak, Reg. No. 34,520, Peter N. Lalos, Reg. No., 19,789, Francis A. Keegan, Reg. No. 19,245 to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected therewith. Please direct all telephone calls to: Ronald R. Snider, Esq., at telephone number (202) 347-2600, and all correspondence to:

Snider & Associates  
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15. We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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**ADDITIONAL NAMES OF CONVEYING PARTIES**

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3. Tomohiro UETAKE

4. Hirotada FUKUNISHI

5. Nao KOJIMA



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
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Washington, D.C. 20231

AUGUST 26, 1997

PTAS

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\*100516403A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

**CORRECTED  
NOTICE**

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

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RECORDATION DATE: 04/17/1997

REEL/FRAME: 8533/0020  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

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DOC DATE: 04/10/1997

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DOC DATE: 04/10/1997

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DOC DATE: 04/10/1997

ASSIGNOR:  
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DOC DATE: 04/10/1997

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8533/0020 PAGE 2

SERIAL NUMBER: 08842891  
PATENT NUMBER:

FILING DATE:  
ISSUE DATE:

JACQUELINE MOORE, PARALEGAL  
ASSIGNMENT DIVISION  
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70998 U.S. PTO  
04/17/97

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08/842891

Commissioner of Patents and Trademarks: Please record use attached original documents or copy thereof.

1. Name of conveying party(ies):

1. Chikao NISHINO

Additional name(s) of conveying party(ies) attached? X Yes No

2. Name and address of receiving party(ies):

Name: Shiseido Co., Ltd.

St. Address: 5-5 Ginza 7-chome, Chuo-ku

3. Nature of conveyance:

☒ Assignment

Merger

Security Agreement

Change of Name

Other:

City: Tokyo 104-10 Country: JAPAN

Additional name(s) & address(es) attached? Yes ☒ No

Execution Date: April 10, 1997

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: April 10, 1997

A. Patent Application No.(s)

B. Patent No.(s)

\*

\*

\*

Additional numbers attached? Yes No ☒

5. Name and address of party to whom correspondence concerning document should be mailed:

Ronald R. Snider

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00000010 08842891

40.00 OP

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$40.00

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Ronald R. Snider

Name of Person Signing

Registration No. 24,962

Signature

April 17, 1997

Date

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Box Assignments

Washington, D.C. 20231

# ASSIGNMENT

SOLE/JOINT INVENTION  
(U.S. Rights Only)

IWA-126

WHEREAS I/We, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

ALKYLENDIAMINE DERIVATIVE, ANTI-ULCER DRUG, AND ANTIBACTERIAL DRUG

(Title of Invention)

for which I/We executed an application for United States Letters Patent concurrently herewith or filed an application for United States Letters Patent on \_\_\_\_\_, 19 \_\_\_\_\_ (Serial No. \_\_\_\_\_); and

WHEREAS, SHISEIDO CO., LTD.

(Full Name of Assignee)

a corporation of JAPAN

(Country of Incorporation)

whose post office address is 5-5 Ginza 7-chome, Chuo-ku, TOKYO 104-10 JAPAN

(hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention, the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from assignee is hereby acknowledged, I/We, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, my/our entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof; and I/We hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment:

AND, I/WE HEREBY further covenant and agree that I/We will, without further consideration, communicate with assignee, its successors and assigns, any facts known to me/us respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to this invention in said assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

IN TESTIMONY WHEREOF, I/We have hereunto set our hand(s).

1. FULL NAME OF SOLE OR FIRST ASSIGNOR Chikao NISHINO	ASSIGNOR'S SIGNATURE <i>Chikao Nishino</i>	DATE April 10, 1997
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## CORRECTION OF PATENTS

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<b>REISSUE APPLICATION BY THE INVENTOR, OFFER TO SURRENDER PATENT</b>		Docket Number (Optional) <b>IWA-126-USAP</b>
<p>This is part of the application for a reissue patent based on the original patent identified below.</p>		
<p>Name of Patentee(s) <b>Chikao Nishino, Kunitaka Sato, Tomohiro Uetake, Hirotada Fukumishi, Nao Kojima</b></p>		
<p>Patent Number <b>5,814,634</b></p>	<p>Date Patent Issued <b>September 29, 1998</b></p>	
<p>Title of Invention <b>Alkylenediamine Derivative Anticancer Drug and Antibacterial Drug</b></p>		
<p>I am the inventor of the original patent. I offer to surrender the original patent.</p> <p>1. <input checked="" type="checkbox"/> Filed herein is a certificate under 37 CFR 3.73(d).</p> <p>2. <input type="checkbox"/> Ownership of the patent is in the inventor(s), and no assignment of the patent has been made.</p> <p>One of boxes 1 or 2 above must be checked.</p> <p>The written consent of all assignees owning an undivided interest in the original patent is included in this application for reissue.</p>		
<p>Signature</p>	<p>Date</p>	
<p>Typed or printed name</p>		
<p>The assignee owning an undivided interest in said original patent is <b>Shiseido Co., Ltd.</b> and the assignee consents to the accompanying application for reissue.</p>		
<p>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application, any patent issued thereon, or any patent to which this declaration is directed.</p>		
<p>Name of assignee <b>Shiseido Co., Ltd.</b></p>		
<p>Signature of person signing for assignee <i>Satoru Takeda</i></p>	<p>Date <b>28. Sep. 2000</b></p>	
<p>Typed or printed name and title of person signing for assignee <b>Satoru TAKEDA, General Manager</b></p>		

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